

Daily GLOWBUGS

Digest: V1 #17

via AB4EL Web Digests @ SunSITE

Purpose: building and operating vacuum tube-based QRP rigs

[AB4EL Ham Radio Homepage @ SunSITE](#)

%%%% GlowBugs %%%% GlowBugs %%%% GlowBugs %%%% GlowBugs %%%%

Subject: glowbugs V1 #17

glowbugs

Sunday, April 27 1997

Volume 01 : Number 017

Date: Sat, 26 Apr 1997 19:37:15 +0000

From: "Brian Carling (Radio G3XLQ / AF4K)" <bry@mnsinc.com>

Subject: Re: Where is everyone on 40M???? Nil sigs heard!!!!!!

Ken - same problem here too... the 3579 and 7050 kHz QRGs have been VERY hard to raise anyone on lately! EVEN using the QRO rig (1625) on 80m nets very few replies on 3579!

I have to keep resorting to the QRO rice box rig (FT-840) and VFO to QSY up to the 3700 range or down around 3525-50 or so.

By the way, you should try using the NEW glowbugs list at:

glowbugs@www.atl.org

There are not many of us left on

glowbugs@sco.theporch.com

On 26 Apr 97 at 18:52, Ken Gordon spoke about Re: Where is everyone on 40M???? N and said:

> On Fri, 25 Apr 1997, Ken Gordon wrote:

>

> > 40 has been so bad lately I can hardly hear anyone. Will try
> > tonight. HW-16 with 7050 crystal (Chirps a bit) and 145 ft end-fed
> > long wire. About 90 watts. Also a little AN/GRC-109 at 10 watts.
> > Will you hear me?!?!?!?!
>

> Well, I got on last night at 0130, at 0155, and again at 0230.
> Heard two stations on there, NA4G weak but readable Q5, and AD4YH at
> 579. Heard AD4YH say that he was rockbound using a DX-40 and a
> Clipperton L at 1 KW into a 55 foot high dipole. He called CQ BA.
> I answered him, but got no response. I also called NA4G but got no
> response. I, too, am rockbound and although I wasn't exactly zero
> beat, I was close enough.

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**Looking for: 860 tubes, WL-460 tubes**
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****Butternut HF2V antenna, G-R test gear.....****

Date: Sat, 26 Apr 1997 20:58:41 -0500 (CDT)
From: mjsilva@ix.netcom.com (michael silva)
Subject: Re: Rebuilding an old glowbug

Brian wrote:

>There are SEVERAL 6GW8 and 6BM8 transmitter articles
>and schematics published on the WWW.

AES has a number of other combo tubes in their latest flyer that would fit nicely into such a transmitter. In addition to our old friend the 6T9 (small triode / big pentode) they also have the 6AL11 (small pentode / big pentode) and the 6GV8 (small triode / big pentode).

73,
Mike, KK6GM

Date: Sun, 27 Apr 1997 00:14:06 -0400 (EDT)
From: "Walter L. Marshall" <wmarshall@CapAccess.org>
Subject: crystal set

Dear Peoples,
Built a short wave crystal set and booted it up tonight.
Works good on a 125 foot random wire and a good ground.
Uses 14 turn primary to the 365mmf cap and diode. Seven
turn secondary to the antenna. Other ends of coils to ground.
Wound on a toilet paper tube.
It dosen't have much selectivity. I'm thinking about making
one with variable antenna coupling.
Does anyone have any good tricks to increase bandspread or
increase selectivity? I have enough volume that I could afford
to sacrifice some to make it work real nice.
I'm hearing Radio HC, german, spanish and english stations.
Unfortunately all at the same time. Seems to be around 6 meg.
hertz.
Walter

Date: Sun, 27 Apr 1997 17:14:23 +0200
From: Jan Axing <janax@li.icl.se>
Subject: My www pages

I have uploaded some popular glowbug tube data on my pages.
Pinout, equivalents, typical operation data, capacitances
and others. Just follow the link on my index page at
<http://www.algonet.se/~janax>

They are updated regularly and, if possible, on request.
Suggestions are welcome, both positive and negative...

73

- --

Jan, SM5GNN
Linköping, Sweden
janax@algonet.se
janax@li.icl.se

Date: Sun, 27 Apr 1997 13:09:32 -0400 (EDT)
From: rdkeys@csemail.cropsci.ncsu.edu
Subject: Re: crystal set ---- NEAT!

> Dear Peoples,
> Built a short wave crystal set and booted it up tonight.
> Works good on a 125 foot random wire and a good ground.
> Uses 14 turn primary to the 365mmf cap and diode. Seven
> turn secondary to the antenna. Other ends of coils to ground.
> Wound on a toilet paper tube.
> It dosen't have much selectivity. I'm thinking about making
> one with variable antenna coupling.
> Does anyone have any good tricks to increase bandspread or
> increase selectivity? I have enough volume that I could afford
> to sacrifice some to make it work real nice.
> I'm hearing Radio HC, german, spanish and english stations.
> Unfortunately all at the same time. Seems to be around 6 meg.
> hertz.
> Walter

Wow! A short wave tuner xtal set. That takes guts!

Note, all you have to do is to add an external heterodyne from something like an LM or BC-221 Freq Meter and you have a perfectly fine WWI style external heterodyne receiver (newbies that don't know their radio history call them ``direct conversion'' receivers).

Several comments to improve selectivity.

1. Use a tuned primary and a tuned secondary. That will help a little, but not an awful lot on 6mhz. Use a high impedance end fed antenna with two parallel tuned tanks, or a low impedance antenna with a series tuned primary circuit. For basic circuit diagrams, see the early WWI Navy sets like the SE-143 and the SE-1220. They were the epitome of xtal set design in military and commercial spark circuits. For best selectivity, use the minimum coupling possible, but always keep the coupling below ``critical coupling'' (i.e., the point where the coupling increase actually reduces selectivity).
2. Use more inductance and less capacitance. Typical short wave coils should use about 50pf capacitance, max for tuning capacitors. The less the tuning capacitor, the greater the selectivity, up to a point. My suggestion would be to swap that 365pf for a 50pf and wind or tap coils to suit.
3. The ideal xtal set would have quadruple or quintuple tuned circuits which would act as a passband for the desired signals. Then you might get some sort of selectivity, although the gain into the xtal would be reduced, and the tuning would be a small nightmare.

4. To increase gain, you might try using a triode grid-leak detector (fet or tube). That would keep the secondary tank Q maximized and help to increase selectivity, because of the high impedance of the device. You can also tap a diode detector down on the secondary to decrease loading effects and maximize tank Q.
5. In the early xtal set tuners (such as the SE-143 and related receivers) secondary circuits often had a step variable capacitance called a ``stopping condenser'' across the telephones. This served to load down and vary the selectivity of the secondary circuit ``by increasing the decrement of the secondary circuit''. That means it was acting as a variable bypass around the telephones, thus acting as a variable filter in a primitive manner. I use the same principle to tune the audio in my regen sets for increasing the selectivity. It works fair to good.

That is all I can think of, now.

I will put the manual to the SE-143 on-line in a while.

Elmer Bucher's 1917 edition of his Practical Wireless Telegraphy has some very good high-class xtal receiver circuits, including ones for external heterodynes. If you can find a copy of that in a library, somewhere, that would make good reading on xtal sets.

73/ZUT DE NA4G/Bob UP

Date: Sun, 27 Apr 1997 13:47:35 -0400 (EDT)
From: rdkeys@csemail.cropsci.ncsu.edu
Subject: Re: Where is everyone on 40M???? Nil sigs heard!!!!!!

>
> Bob Keys was lamenting:
> >Hey folks, where did everyone go on 40M?
>
> Well, guess I've gotta stop working on the 160 and 80 meter stuff! Have
> nothing for 40M except the Knight T-150. Soon as I get the mods done to
> exorcise the chirpy and yoopy demons from the beast I'll give it a shot.

Hey, amongst friends, a little ``character'' to the signal is a welcome conviviality. I can always spot particular glowbugs by their timbre and character. Then ye knows wid whom ye be a'speakin'.

> Is it just me or do most of us have lots of stuff for 160 and 80 and not much
> for the shorter waves?

Actually, most of my stuff is 160/80/40, but mostly used on 160/80. I mostly prefer 80, but for some reason the crewe seems to be hot on 40, so I try to chime in there, too, but my love is 80M.

Actually, at later times (usually about 2 hrs after sundown) 80M is always good and the noise quiets down by then. I know some fellers down in the bayou bilgewater have an inordinate time wid noise, but, by 0300 or 0400Z that should have settled enough (barring local noise sources) that the band is still quite usable, and 80M does NOT have the skip problems we seem to be having on 40M, where coast-to-coast is fine, but interim hop is nil.

* For the next several nights, I will try 0400Z on 3579R545, and see if ye *
* be about wid them thar glowwebugges. *

73/ZUT DE NA4G/Bob UP

Date: Sun, 27 Apr 1997 12:06:35 -0600
From: Doug <doug@sunrise.alpinet.net>
Subject: Parts...ART13A

Hi fellow fingerburners, just a note looking for some pieces for an old ART13 I'm working on. I've got most all the tubes now with the final load coming from Fair Radio soon. I'd like to find any parts, subassemblies, connector plugs and (even!) a good dynamotor for it.

I had one of these monsters running when I was a kid...even put in a grid block keying modification to spare the ears (and sense of humor) whilst pounding out my Morse to the far end of those early Qsos. It worked great, with the complaints from my father about "That Damned Clicking!!!!" dropping off too. But, like all things we should hold on to, this beauty hit the landfill courtesy of my ex-wife during the divorce....sigh. I sure miss her.....not the wife though!

So, if you have ART13 parts ratholed and would like to sell them off to another sick guy with an affection for the "good old stuff", drop me a line and we'll deal.

Thanks a bunch

73

Doug, K7YD
Livingston, MT

Date: Sun, 27 Apr 1997 14:14:06 +0000
From: "Brian Carling (Radio G3XLQ / AF4K)" <bry@mnsinc.com>
Subject: Re: 40 meter activity

Sandy - 40m has been absolutely awful here. Weak sigs and lots of QRN.

I heard you pounding away last night with someone back east here. He was single hop to me, being closer, so a bit stronger than you, but I heard your, aem, distinctive signal!

Great job - keep it up and see you on there soon. I am still wrestling with my keyer situation. A guy gave me mercury relay, but after I soldered to it, it died. So now I have to try to get a few more!!

That's been distracting me from getting on the iar much lately.

On 27 Apr 97 at 0:43, Sandy W5TVW spoke about 40 meter activity and said:

> Was just on 40 at 7050 with the KW going. Lots of Mexican
> and other
> DX fones on.
> One even asked me to move to the CW band! Can you imagine? After I
> thumped "QRZ BA de W5TVW" a few times he vacated the frequency.
> Sounds like he was contesting and working "split".
> Will be standing by for BA/GB calls. Will probably be
> calling CQ BA
> again at 0100 and 0200Z. Lots of QRN tonight from the storms that
> passed thru today. 73, E. V. Sandy Blaize, W5TVW "Boat Anchors
> collected, restored, repaired, traded and used!" 417 Ridgewood
> Drive, Metairie, LA., 70001 ebjr@worldnet.att.net **Looking for:
> 860 tubes, WL-460 tubes** **Butternut HF2V antenna, G-R test
> gear.....***
>
>

*** 73 from Radio AF4K / G3XLQ in Gaithersburg, MD USA *
** E-mail to: bry@mnsinc.com *
*** See the great ham radio resources at: *
** <http://www.mnsinc.com/bry/> *

Date: Mon, 28 Apr 1997 00:27:27 +0100
From: Frank Dinger <frank.dinger@zetnet.co.uk>
Subject: VHF Mil tx with 807 + 3x 829

Last year I acquired from a fleamarket in the Netherlands a mil tx ,with
4 xtal channels 807 osc ,a 829 tripler another 829 tripler and a 829 PA
Fitted in a 22 inch cabinet for rack mounting . With all RF
components caged (approx 60% of chassis depth) with remaining 40%
open rear chassis containing centrif. blower (cooling anodes of last
tripler and PA valve) ,also with a RF changeover switch with 3 N-type
RF connections operated by a 'clink-clonk' solenoid via a pinion and
rack mechanism.
The 2 triplers and PA can all be separately tuned from the front panel.
The 4 xtals (not present) can be fitted in a thermostatted oven
accessible from the (black painted)front panel.
There are no transformers on the chassis.
Front panel also has PA current meter with 4-way switch for osc-1st tripler
- -2nd tripler-PA and a PA grid current meter.
I think it is a VHF > 100 MHz ? TX for AM . Tuned circuit components
suggest unit could be used for 144-148 MHz ,perhaps with some mods.
In AB1 configuration I expect PA to deliver 50-75 Watts. Am I correct ?

Does any Old Timer remember having used/seen this TX? Chassis does
not show any manufacturing info ,ie model nr etc.

Tnx in anticipation for any info on this unit.

Frank Dinger , Inver by Tain , Ross-shire IV20 1RX - Scotland
e-mail : gm0csz.kn6wh@ukrs.org
Packet : GM0CSZ @ GB7NOS.#76.GBR.EU

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> --JAH13495.861786480/irwell.zetnet.co.uk--

End of glowbugs V1 #17

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